

IN THE SPECIFICATION

Please substitute the following replacement paragraphs:

[0003] It would therefore be desirable to configure the VoIP equipment to provide for monitoring of customer premises equipment (CPE) ~~[[CPE]]~~ by legal lawful groups.

[0008] FIG. 3 shows a simplified signal block diagram showing one embodiment of "calls" established in the VoIP system of FIG. 1 between a plurality of ~~customer~~ consumer premises equipment (CPE) and "monitoring" that plurality of calls using a real time protocol (RTP) server;

[0012] This disclosure describes monitoring of telephone systems by lawful groups, or agencies such as the police. The structure and operation of the Voice over Internet (VoIP) system 100, that represents one embodiment of digital telephone system, is described. The techniques by which the VoIP system is monitored is also described. The expression "customer premises equipment" (CPE) and "consumer premises equipment" (CPE) are used interchangeably throughout this description along with the Figures herein described.

[0013] FIG. 1 shows one embodiment of voice over Internet (VoIP) system 100. The VoIP system 100 provides for voice communication between a plurality of ~~customer~~ consumer premises equipment (CPE) 101 over an Internet (IP) network 106 and a hyper fiber coax network (HFC) 102. Alternatively, the VoIP system 100 provides for voice communication between a CPE 101 and a CPE 118 over the IP network 106, the HFC 102, and a LEC circuit switched network 116. The CPE 101 is configured to include, e.g., a cable modem 103 and a subscriber telephone 107, or any

other communication device such as a communications gateway 104 that allows for subscriber telephone 107 to communicate over the IP network 106. A HFC 102 is configured to provide optic-based cable communications between the local CPE 101 and a cable modem termination system (CMTS) 105.

[0015] The HFC 102 allows for the cable modem 103 to communicate via the CMTS 105 over the IP network 106. This disclosure describes the interaction between one embodiment of CPE ~~[[108]]~~ 101, as shown in FIG. 2, and other portions of the VoIP system 100. The HFC 102 allows for data and IP voice to share the bandwidth with television channels. The CPE 101 includes one or a plurality of telephone end points to which the subscriber telephone 107 connects. The CMTS 105 can be configured to provide for data, cable TV and/or telephone applications.

[0040] As shown in the embodiment of FIG. 4, the central monitor system initiates the monitor actuating call 310 so that the call agent 108 can commence that monitoring process shown in step 402. The method 400 shown in FIG. 4 continues to step 404 in which the call agent creates a connection between the RTP mirror and the RTP server. The notify "NTFY" signal 502 is transmitted from the MTA 136a to the MTA 136b ~~[[is]]~~ as shown in ~~step 404~~ in FIG. 5. The NTFY signal 502 is sent after the CPE 101a shown in FIG. 3 goes off hook as shown by 501. The call agent 108, in response to the NTFY signal 502, sends a create connection to call mirror signal "CRCX" 504. In addition, call connection to RTP server signal 508 is also provided between the call agent 108 and the RTP server 152. The combination of the signals 502, 504, and 506 interact to establish the RTP monitor call 314 established between the RTP mirror 270 and the RTP server 152, as shown in FIG. 3 and FIG. 5. The RTP monitor call is established in step 406 of FIG. 4. The RTP

Applicant: Zheng Fang
Application No.: 09/833,291

monitor call 314 monitors the entire call 312 between the MTA 136a and the MTA 136b.

[0043] The user at the call monitor device 154 can also terminate the monitor call [[34]] 314 even though the RTP call 312 is continued. Under these circumstances, the RTP call 312 would continue, including the transmission of the original RTP packets between the MTA 136a and the MTA 136b, without any corresponding copy RTP packets being transmitted from the RTP mirror 270 to the RTP server 152 to form the RTP monitor call 314.